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Title 154 - STATE FIRE MARSHAL

Chapter 2 - MANUFACTURE: BLASTING AGENTS

001. Manufacture: Blasting Agents

001.01. Buildings or other facilities used for mixing blasting agents, including mobile equipment, shall be located, with respect to inhabited buildings, passenger railroads and public highways, in accordance with the American Table of Distances. (See Appendix V.)

001.01A. Minimum intra-plant separation distances between mixing units and the oxidizer storage areas and blasting agent storage areas shall be determined by the prevailing standards in the trade and shall be reported to the State Fire Marshal in writing for his or her approval.

001.01B. Any oxidizer stored at a closer distance to the blasting agent storage area than as provided in Section 001.01A above shall be added to the quantity of blasting agents to calculate the total quantity involved for application of the aforementioned Table.

001.02. Buildings used for the mixing of blasting agents shall conform to the requirements of these Rules and Regulations, unless otherwise specifically approved by the State Fire Marshal.

001.02A. Buildings shall be of noncombustible construction or sheet metal on wood studs.

001.02B. The layout of the mixing building shall be such as to provide physical separation between the finished product storage, and the mixing and packaging operations.

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001.02C. Floors in storage areas and in the processing plant shall be of concrete. Isolated fuel storage shall be provided to avoid contact between molten oxidizer and fuel in case of fire.

001.02D. The building shall be well ventilated.

001.02E. Heat shall be provided exclusively from a unit outside the building.

001.03. The design of the mixer shall minimize the possibility of frictional heating, compaction, and especially, confinement. Bearings and gears shall be protected against the accumulation of oxidizer dust. All surfaces shall be accessible for cleaning. Mixing and packaging equipment shall be constructed of materials compatible with the fuel-oxidizer composition.

001.04. The sensitivity of the blasting agent shall be determined by means of a No. 8 test blasting cap at regular intervals and after every change in ingredients, composition or packaging, or as may be requested by the State Fire Marshal.

001.04A. No liquid fuel with flash point lower than that of No. 2 Diesel fuel oil (125 degrees minimum of legal) shall be used.

001.04B. If solid fuels are used, they shall be chosen so as to minimize dust explosion hazards.

001.04C. Metal dusts (Aluminum powder, etc.), peroxides, chlorates or perchlorates shall not be used unless such operations are conducted in a manner approved by the State Fire Marshal.

001.04D. Unusual compositions shall not be attempted except under the supervision of competent personnel equipped to determine the overall hazards of the resulting compositions.

001.05. All electrical switches, controls, motors, and lights, if located in the mixing room, shall conform to the requirements of Class II, Division 2 of the National Electrical Code, otherwise, they shall be located outside the mixing room. The frame of the mixer and all other equipment that may be used shall be electrically bonded and provided with a continuous path to the ground.

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001.06. Washdown facilities shall be provided. Floors shall be constructed so as to eliminate open floor drains and piping into which molten materials could flow and be confined in case of fire. The floors and equipment of the mixing and packaging room shall be washed down frequently to prevent accumulation of oxidizers or fuels and other sensitizers. The entire mixing and packaging plant shall be washed down periodically to prevent excessive accumulation of dust.

001.07. Smoking or open flames shall not be permitted in or within 50 feet of any building or facility used for the mixing of blasting agents.

001.08. Empty oxidizer bags shall be disposed of daily in a safe manner.

001.09. Not more than one day's production of blasting agents shall be permitted in or near the mixing and packaging plant or area. Larger quantities shall be stored in separate warehouses or magazines in accordance with provisions listed under Storage of Explosives. (Chapter 5)

Statutory Authority: Neb. Rev. Stat. §§28-1213 to 28-1239; 81-502

Legal Citation: Title 154, Ch. 3, Nebraska State Fire Marshal